

HTIRC-03-001



November 18, 2003

To: Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/650,602 08/28/03

Charles C. Lin et al.

CPP READ HEAD FOR HIGH DENSITY AND  
SHIELD NOISE SUPPRESSION

Grp. Art Unit: \_\_\_\_\_

#### INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56. Copies of each document is included herewith.

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on November 20, 2003.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

SB Ackerman 11/21/03

U.S. Patent 6,515,573 to Dong et al., "Method and System for Providing Edge-Junction TMR Utilizing a Hard Magnet as a Pinned Layer," describes a small free layer resulting in reduced noise.

U.S. Patent 6,473,279 to Smith et al., "In-Stack Single-Domain Stabilization of Free Layers for CIP and CPP Spin-Valve or Tunnel-Valve Read Heads," discusses noise in the free layer.

U.S. Patent 6,469,879 to Redon et al., "Magneto-Resistive Tunnel Junction Head with Biasing Elements Abutting Free Layer Extended Portions," discloses that noise occurs if the free layer is too thin.

U.S. Patent 5,959,811 to Richardson, "Magnetoresistive Transducer with Four-Lead Contact," discloses noise current in the leads.

U.S. Patent 5,784,224 to Rottmayer et al., "Compact Read/Write Head Having Biased GMR Element," teaches a configuration to reduce noise in the read signal.

Sincerely,

A handwritten signature in black ink, appearing to read 'SBA', followed by a horizontal line.

Stephen B. Ackerman,  
Reg. No. 37761

Form PTO-1449  INFORMATION DISCLOSURE CITATION IN AN APPLICATION  (Use several sheets if necessary)	Document Number (Optional) <b>HTIRC-03-001</b>	Application Number <b>10/650,602</b>
	Applicant <b>Charles C. Lin et al.</b>	
	Filing Date <b>08/28/03</b>	Group Art Unit

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6515573	2/4/03	Dong et al.	338	32 R	6/19/00
	6473279	10/29/02	Smith et al.	360	324.12	1/4/01
	6469879	10/22/02	Reden et al.	360	324.2	3/2/00
	5959811	9/28/99	Richardson	360	113	1/13/98
	5784224	7/2/98	Rottmayer et al.	360	113	7/17/96

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
					YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)


EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

